Mr. David Eades General Manager, Aramark Uniform Services 3752 North Fruitridge Terre Haute, IN 47804

Re: Registered Construction and Operation Status, R 167-16062-00132

Dear Mr. Eades:

The application from Aramark Uniform Services, received on September 10, 2002, has been reviewed. Based on the data submitted and the provisions in Sections 1 and 2 of 326 IAC 2-1, it has been determined that the following Industrial Laundry Facility, to be located at 3752 North Fruitridge, Terre Haute, Indiana, 47804, is classified as registered:

- (a) Four (4) dryers with a combined heat input of 8.43 MM BTU/hr,
- (b) One (1) finishing tunnel with a heat input of 0.4 MM BTU/hr, and
- (c) One (1) boiler with a heat input of 16.8 MM BTU/hr.

Pursuant to 326 IAC 6-2-4 (Particulate Emissions From Indirect Heating), the six (6) units are limited to 0.464 pounds per million BTU.

Any change or modification which may increase the potential  $NO_X$  emissions to twenty-five (25) tons per year or more from the equipment covered in this registration must be approved by Vigo County Air Pollution Control (VCAPC) or the Indiana Department of Environmental Management (IDEM) before such change may occur.

Sincerely,

Original Signed by George M. Needham George M. Needham Director Vigo County Air Pollution Control

SBS cc: Winter Bottum, IDEM Mindy Hahn, IDEM

# Indiana Department of Environmental Management Office of Air Quality and Vigo County Air Pollution Control

# Technical Support Document (TSD) for a Re-Registration

## **Source Background and Description**

Source Name: Aramark Uniform Services

Source Location: 3752 North Fruitridge Ave., Terre Haute, Indiana 47804

County: Vigo SIC Code: 7218

Operation Permit No.: 167-16062-00132

Permit Reviewer: Scott Sines

Vigo County Air Pollution control has reviewed an application for a re-registration pursuant to 326 IAC 2-5.5-2 from Aramark Uniform Services relating to the operation of an Industrial Laundry Facility, consisting of:

- (a) Four (4) dryers with a combined heat input of 8.43 MM BTU/hr,
- (b) One (1) finishing tunnel with a heat input of 0.4 MM BTU/hr, and
- (c) One (1) boiler with a heat input of 16.8 MM BTU/hr.

# **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
Stack 1	Dryer 1	32.5	2	6500	200
Stack 2	Dryer 2	32.5	2	8000	200
Stack 3	Dryer 3	32.5	2.5	6500	180
Stack 4	Dryer 4	31.5	0.67	2250	200
Stack 5	Steam Tunnel	31.0	0.83	2200	-
Stack 5A	Steam Tunnel	31.5	0.83	855	-
Stack 6	Boiler 1	33.0	3	5280	550

#### Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on September 10, 2002. The source was initially granted "Exempt Operation Status" on September 10, 1986.

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Aramark Uniform Services Terre Haute, Indiana Permit Reviewer: Scott Sines

#### **Emission Calculations**

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A, page 1, of this document.

#### **Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)			
P.M.	0.595			
P.M10	0.843			
SO <sub>2</sub>	0.067			
VOC	0.610			
CO	9.27			
NO <sub>x</sub>	11.08			

#### Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (P.M.) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

#### **Actual Emissions**

No previous emission data has been received from the source.

# **County Attainment Status**

The source is located in Vigo County.

Pollutant	Status			
P.M10	attainment			
SO <sub>2</sub>	maintenance attainment			
$NO_2$	attainment			
Ozone	attainment			
СО	attainment			
Lead	attainment			

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Vigo County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Vigo County has been classified as attainment of unclassifiable for the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD) 326 IAC 2-2. See the State Rule Applicability for the source section.

## **Federal Rule Applicability**

- (a) New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60 Subpart Dc) apply to this source as the 16.8 MM BTU/hr boiler was installed in 1997 and has a heat input of greater than 10 MM BTU/hr, but less than 100 MM BTU/hr. The source will maintain records of the amounts of each fuel combusted each day. As this source has a heat input of less than 30 MM BTU/hr and is fired on natural gas only there are no specific provisions that apply.
- (b) There are no other New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) that apply to this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.
- (d) This source is not a dry cleaning operation; therefore there are no dry cleaning operation rules applicable to this source.

#### State Rule Applicability - Entire Source

326 IAC 6-1 (Particulate Emission Limitations for Nonattainment Areas)

The source has a P.M. potential to emit of less than one hundred (100) tons per year and actual emissions of less than ten (10) tons per year, therefore 326 IAC 6-1-2 does not apply.

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The six (6) heating units are subject to 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4, the particulate matter (P.M.) emissions shall be limited to 0.464 pounds per million BTU heat input. By multiplying the limit by the heat input rating (combined) and adjusting the units to tons per year a limit of 1.44 tons per year is generated. Since this limit is above the 0.122 tons per year of potential emissions Aramark Uniform Services will be in compliance with 326 IAC 6-2-4. See attached calculations for details.

## 326 IAC 6-3 (Process Operations)

This source is exempt from 326 IAC 6-3 (Process Operations), as it's only sources of particulate emissions (P.M.) are from combustion for indirect heating.

## Conclusion

The construction and operation of this Industrial Laundry Facility shall be subject to the conditions of the attached proposed Registration No: 167-16062-00132.

Reviewer: Scott Sines

Colmac Hourly (lb/hr)

Annual (tpy)

0.003

0.013

0.0002

0.0011

# Criteria Pollutants

Criteria Pollutants										
Potential to Emit	PM	sox	NOX	VOC	СО	LEAD				
Hourly (lb/hr)	0.328	0.015	2.529	0.139	2.117	0				
Annual (tpy)	1.437	0.067	11.08	0.609	9.273	0				
	Potential to Emit (by source)									
D !!	PM	sox	NOX	VOC	СО	LEAD	PM10			
Boiler 1 Hourly (lb/hr)	0.125	0.0099	1.65	0.0091	1.38	0.00	0.00			
Annual (tpy)	0.549	0.0433	7.22	0.397	6.07	0.00	0.00			
	РМ	sox	NOX	voc	со	LEAD	PM10			
Dryer 1										
Hourly (lb/hr)	0.021	0.0016	0.27	0.015	0.229	0.00	0.022			
Annual (tpy)	0.091	0.0072	1.20	0.066	1.00	0.00	0.095			
	PM	sox	NOX	VOC	CO	LEAD	PM10			
Dryer 2	0.021	0.0016	0.27	0.015	0.231	0.00	0.022			
Hourly (lb/hr) Annual (tpy)	0.021	0.0016	1.20	0.015	1.01	0.00	0.022			
Airidai (tpy)	0.001	0.0072	1.20	0.000	1.01	0.00	0.000			
	PM	SOX	NOX	VOC	CO	LEAD	PM10			
Dryer 3										
Hourly (lb/hr)	0.021	0.0016	0.27	0.015	0.231	0.00	0.022			
Annual (tpy)	0.091	0.0072	1.20	0.066	1.01	0.00	0.095			
	PM	SOX	NOX	VOC	CO	LEAD	PM10			
Dryer 4										
Hourly (lb/hr)	0.0015	0.0001	0.019	0.001	0.008	0.00	0.071			
Annual (tpy)	0.0067	0.0005	0.082	0.005	0.004	0.00	0.307			
	PM	sox	NOX	VOC	СО	LEAD	PM10			

0.039

0.172

0.002

0.009

0.033

0.144

0.00

0.00

0.00

0.00